

DESCRIPTION OF A NEW NORTH AMERICAN LIZARD OF THE
GENUS SAUROMALUS.

BY

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Sauromalus hispidus, sp. nov.

DIAGNOSIS.—Nuchal scales spiny, the larger ones almost as large as the largest preauricular spines; dorsal scales ending posteriorly in a long, obtuse spine; dorsal scale rows average 16 to a head length; number of ventral scale rows from gular fold to anus averages 118; number of scales around thickest part of tail averages 50; femoral pores 12 to 15; size very large: total length of four specimens averages 540 millimetres.

HABITAT.—Angel de la Guardia Island, Gulf of California.

Type.—U. S. National Museum No. 8563. Dr. Thos. H. Streets coll.

Synonymy.

1877.—*Sauromalus ater* STREETS, Bull. U. S. Nat. Mus., No. 7, p. 36 (*nec* DUMÉRIL).
TOWNSEND, Proc. U. S. Nat. Mus., XIII (No. 800) 1890, p. 144.

Description of type specimen.—Habit very stout, head depressed, body less so; nostrils large, tubular, opening upwards and outwards; upper head-scales large, considerably larger than the supraoculars, those of the parietal region largest, tubercular, some nearly conical; three series of strong conical scales in front of ear; several series of large conical tubercles on side of basal half of mandible; neck above very rough, covered with large but obtuse spines, most of them fully as large as the anteaauricular denticulation, and descending on the postauricular fold, sending a strong branch forward, nearly connecting with the mandibular spines; dorsal scales large, 16 in a head length, ending posteriorly in an obtuse spine, even the smaller scales above and back of the arms being spiny; ventral scales smaller and smoother, but the outer posterior corner somewhat projecting and pointed, about 118 scales in a line from anal opening to gular fold; scales on limbs large, about the size of those on nape, carinated and obtusely spinose; femoral pores very large, 13 on each side; scales on tail in verticils, large, about 44 in a verticil round the thickest portion at base, on the

upper surface carinate and strongly spinose behind. Color (in alcohol) apparently uniform brownish olive, though in life they are said to be "marked with one, two, or three large, rounded, or irregular grayish blotches somewhere on their body." (Streets *l. c.*)

In addition to the type specimen I have before me three others nearly as large, collected by Mr. Charles H. Townsend in the same locality. They agree in all essential characters with the type, some of the details and measurements (in millimetres) being found in the following table:

Sauromalus hispidus.

| U. S. Nat. Mus. No. | Collector and No. | Locality. | Date. | Dorsal scale rows in head length. | Ventral scale rows, anus to gular fold. | Scales round thickest part of tail. | Femoral pores. | Total length. | Length of tail. |
|--------------------------------|-------------------|------------------------|---------------|-----------------------------------|---|-------------------------------------|----------------|---------------|-----------------|
| 8563 | Streets | Angel Isl, Gulf of Cal | ..... | 16 | 118 | 44 | ..... | 585 | 285 |
| 15873 | Townsend, 24..... | do..... | Mar. 29, 1889 | 19 | 116 | 55 | ..... | 552 | 275 |
| 15874 | do..... | do..... | do..... | 15 | 113 | 43 | ..... | 562 | 292 |
| 15875 | do..... | do..... | do..... | 14 | 126 | 53 | ..... | 462 | 240 |
| Average of four specimens..... | | | | 16 | 118 | 49 | ..... | ..... | ..... |

This enormous lizard is closely allied to the much smaller species which inhabits the arid regions on the mainland to the north of the Gulf of California, viz, *Sauromalus ater*, with which it has been confounded, but is readily distinguished by the characters given in the above diagnosis. In order to better emphasize the differences I herewith give the corresponding diagnosis of the old species.

Sauromalus ater DUM.

DIAGNOSIS.—Nuchal scales tubercular, or smooth, none of them half as large as largest preauricular spines; dorsal scales squarish, smooth, without any spine; dorsal scale rows average 32 to a head length; number of ventral scale rows from gular fold to anus averages 165; number of scales around thickest part of tail averages 76; femoral pores 15 to 18; size medium: total length of four adults averages 314 millimetres.

HABITAT.—Desert regions of southern California and southwestern Arizona.

Type.—In Muséum d'histoire naturelle, Paris, France. Locality unknown. Lieut. Jaurès coll.

Synonymy.

1856.—*Sauromalus ater* A. DUMÉRIL, Arch. Mus. d'Hist. Nat., VIII, p. 536, pl. xxiii, figs. 3, 3a.

1858.—*Euphryne obesus* BAIRD, Proc. Phil. Acad. 1858, p. 253.—*Id.*, U. S. and Mex. Bound. Surv., II., Zool. Rept., p. 6, pl. xxvii (1859).

For comparison with *Sauromalus hispidus* I give the following table of details and measurements:

Sauromalus ater.

| U. S. Nat. Mus. No. | Collector and No. | Locality. | Date. | Dorsal scale rows in head length. | Ventral scale rows, anus to gular fold. | Scales round thickest part of tail. | Femoral pores. | Total length. | Length of tail. |
|--------------------------------|-------------------|------------------------|------------|-----------------------------------|---|-------------------------------------|----------------|---------------|-----------------|
| 12264 | Möllhausen... | Yampai Valley..... | ..... | 29 | 162 | 78 | 11 | 388 | 203 |
| 4172 | Thomas | Fort Yuma, Ariz..... | ..... | 28 | 182 | 73 | 11 | 302 | 140 |
| 11810 | Möllhausen .. | Colorado River..... | ..... | 34 | 161 | 72 | 11 | 313 | 153 |
| 16503 | Oreutt..... | San Diego County, Cal. | Apr., 1889 | 31 | 160 | 77 | 11 | 253 | 125 |
| 11810 juv. | Möllhausen... | Colorado River..... | ..... | 37 | *160 | *80 | 11 | 180 | 85 |
| Average of five specimens..... | | | | 32 | 165 | 76 | ..... | ..... | ..... |

*About.

In all probability the young of *Sauromalus hispidus* is much less spiny than the old ones, but the scales would be much larger than in corresponding specimens of *S. ater* and their number consequently smaller.

There is in our collection a medium-sized specimen of a *Sauromalus* collected by Mr. L. Belding on Espiritu Santo Island, at La Paz, near the southern extremity of the peninsula of Lower California (U. S. National Museum No. 12633), the true position of which I am not yet prepared to state, as I do not know whether it is fully adult or not. It is smooth like *S. ater*, but the relative size of the scales is somewhat larger, though not so large as in *S. hispidus*. It would be very interesting to receive a series of specimens from that locality.

Mr. Belding also states (West American Scientist, III, April, 1887, p. 97) that he found a *Sauromalus* at Guaymas, Mexico, but not having seen a specimen I can say nothing as to its specific identity.

It has long been suspected that these huge lizards live on vegetable food, in fact, Dr. Streets' statement (*l. c.*) as to the nature of their excretæ made it almost certain, but, to remove all doubt, I had the stomach of one of the large specimens (collected by Mr. Townsend) opened, and Prof. W. B. Barrows, of the U. S. Department of Agriculture, had the kindness to submit the contents to one of the experts in that line for examination. He reports that the contents are exclusively vegetable and that the numerous seeds are those of a malvaceous plant, probably *Sphæralcea hastulata*.